

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Waste Management of Virginia, Inc.
Facility Name: Charles City County Landfill
Facility Location: 8000 Chambers Road
Charles City County, Virginia 23030
Registration Number: 51254
Permit Number: VA-51254

January 1, 2004
Effective Date

December 31, 2008
Expiration Date

Gerard Seeley, Jr.
Regional Director

September 7, 2006
Signature Date

Permit consists of 27 pages

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I. Facility Information

Permittee

Waste Management of Virginia, Inc.
8000 Chambers Road
Charles City County, Virginia 23030

Responsible Official

Greg Enterline
District Manager
804/966-8707

Facility

Charles City County Landfill
8000 Chambers Road
Charles City County, Virginia 23030

Contact Person

Jill Jamison
Manager, Environmental Protection
804/815-2750

AFS Identification Number: 51-036-0014

Facility Description: NAICS Code 562212 and SIC Code: 4953 - This facility consists of a municipal solid waste landfill that collects the landfill gas and burns it primarily in either an open flare or the gas is routed to a treatment system that processes the collected gas for subsequent sale or use to energy recovery device(s).

Emission Units

Equipment to be operated consists of:

| Emission Unit ID | Emission Unit Description | Size/Rated Capacity* | Pollution Control Device Description (PCD) | PCD ID | Stack ID | Pollutant Controlled | Applicable Permit Date |
|---------------------|---|---|--|----------------------|----------------------|--|------------------------|
| Landfill Operations | | | | | | | |
| | Municipal Solid Waste Landfill operating since 1990 | 45,207,848 yd ³ with a maximum compaction of 1,800 lbs/yd ³ | Open flare rated at 3600 SCFM 1994 | D002 | V002 | NMOC designed and operated as in 40 CFR 60.18; VOC; HAPs | 08/30/2006 |
| | | | Three Open flares rated at 2500 SCFM 2005 (Phased) | D003 D004 D005 | V003 V004 V005 | NMOC designed and operated as in 40 CFR 60.18; VOC; HAPs | |
| | | | Two Open flares rated at 50 SCFM | D006 D007 | V006 V007 | Solar powered, odor control <u>state only</u> . | |
| Storage Tanks | | | | | | | |
| PO8 | Leachate above ground storage tank 1990 | 250,000 gallons | None | none | fugitive | N/A | n/a |
| PO9 | Leachate above ground storage tank 1990 | 250,000 gallons | None | none | fugitive | N/A | n/a |

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

II. Landfill Requirements – (Units L01, D002, D003, D004, D005, D006 and D007)

A. Process and Control Requirements

1. **LFG collection and control system** - The permittee shall operate a landfill gas (LFG) collection and control system that:
 - a. Is designed to handle the maximum expected gas flow rate from the entire area of the landfill;
 - b. Collects gas from each area, cell or group of cells in which initial solid waste has been in place for a period of:
 - (1) 5 years or more if active; or
 - (2) 2 years or more if closed or at final grade;
 - c. Collects gas at a sufficient extraction rate;
 - d. Is operated with each wellhead under negative pressure except as provided in 40 CFR 60.753 (b).
 - e. Is operated with each interior wellhead in the collection system having a landfill gas temperature less than 55°C and having either a nitrogen content less than 20 percent, as determined by EPA Method 3C; or an oxygen content less than 5 percent, as determined by EPA Method 3A. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
 - f. Is designed to minimize off-site migration of subsurface gas;
 - g. Routes the collected landfill gas to a treatment system that processes the collected gas for subsequent sale or use to energy recovery device(s). The treatment system must produce pipeline quality gas if the facility desires to meet the requirements of 40 CFR 60.752(b)(iii)(C) with a device other than energy recovery. All emissions from any atmospheric vent from the gas treatment system is subject to the requirements listed in 40 CFR 60.752 (b)(2)(iii) (A) and (B); **OR**
 - h. Controls landfill gas emissions by routing the collected landfill gas to a flare. The flare must meet the criteria in 40 CFR 60.18;
 - i. Maintains the methane concentration at the surface of the landfill at less than 500 ppmv above the background level.

(9 VAC 5-80-110 and Condition 4 of 08/30/2006 Permit)

2. **LFG collection system** - The permittee shall operate the system such that all collected gases are routed to D002, D003, D004, D005, F001 or a treatment system that process the collected gas for subsequent sale or use to energy recovery device(s). In the event that the system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.
(9 VAC 5-50-410 and 40 CFR 60.753(e))
3. **LFG control system** - The gas control system shall be in operation at all times when the collected gas is routed to the system.
(9 VAC 5-80-110 and Condition 9 of 08/30/2006 Permit)
4. **Fuel** - The approved fuel for the open flares (D002, D003, D004, D005, D006 and D007) is landfill gas. The open flares may also use propane gas to ignite the pilot flame. A change in fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 10 of 08/30/2006 Permit; D001 removed)
5. **Fuel** - The landfill collection and control system, which consists of the four (4) open flares [(D002, D003, D004 and D005)] and shall consume no more than 4,572,700,000 (4.5727×10^9) cubic feet of landfill gas per year, calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-170-160, 9 VAC 5-80-1180 and Condition 11 of 08/30/2006 Permit)
6. **Open flare criteria** - The open flares (D002, D003, D004 and D005) shall meet the criteria in 40 CFR 60.18.
(9 VAC 5-80-110 and Condition 5 of 08/30/2006 Permit)
7. **Open flare gas heating value** - The net heating value of the landfill gas consumed by the open flare shall be at least 200 Btu/standard cubic foot.
(9 VAC 5-50-410 and 40 CFR 60.18 (c)(3)(ii))
8. **Open flare hours of operation** - The three open 2500 SCFM flares shall operate no more than 17,520 hours per year, calculated monthly as the sum of the previous 12 month period and no more than two shall be operated at one time.
(9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 12 of 08/30/2006 Permit)
9. **Dust emission controls** - Unless otherwise specified, dust emission controls shall include the following or equivalent as a minimum:
 - a. Dust from grading, cell construction, waste compaction, application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ) control measures.
 - b. All material being stockpiled shall be kept moist to control dust during storage and handling, or covered to minimize emissions.
 - c. Dust from haul roads shall be controlled by wet suppression and prompt removal of dried sediment resulting from soil erosion and dirt spilled or tracked onto paved surfaces within the landfill.

- d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110 and Condition 6 of 08/30/2006 Permit)

B. Operational Standards - NSPS Subpart WWW

1. The permittee shall demonstrate compliance with operational standards for the landfill gas collection and control system required by Subpart WWW (40 CFR 60.753) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). The permittee shall demonstrate compliance of the landfill gas collection and control system requirements of Subpart WWW (40 CFR 60.752) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). All reports required to demonstrate compliance with the compliance requirements of Subpart WWW (40 CFR 60.755) shall be prepared and submitted to the Piedmont Regional Office as required by Subpart WWW (40 CFR 60.755).

(9 VAC 5-80-1180, 9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 7 of 08/31/2006 Permit)

2. Except where this permit is more restrictive than the applicable requirement, the MSW landfill shall be constructed and operated in accordance with 40 CFR 60, Subpart WWW.

(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 8 of 08/30/2006 Permit)

3. The operation of the landfill gas collection and control system shall be monitored as follows:

- a. The following items shall be monitored each month:

1. Gauge pressure, each well.
2. LFG temperature, each well.
3. Nitrogen concentration or oxygen concentration, each well.

- b. The methane concentration at landfill surface shall be monitored at least once every quarter.

(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 22 of 08/30/2006 Permit)

C. Emission Limitations

1. **Visible emissions** - The open flare (D002, D003, D004, D005, D006 and D007) shall be operated with no visible emissions, as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during two consecutive hours. This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 13 of 08/30/2006 Permit)

2. **Emission Factors** – The following emission factors (or others approved by the Piedmont Regional Office) shall be used to calculate emissions from five new open flares and the existing 3600 scfm open flare:

| | | |
|-------------------------------------|-------|---|
| Particulate Matter/PM ₁₀ | 17.0 | lbs/mmcf CH ₄ |
| Sulfur Dioxide | 8.9 | lbs/mmcf LFG* |
| Nitrogen Oxides | 40.0 | lbs/mmcf CH ₄ (2500/50 SCFM Flare) |
| Nitrogen Oxides | 0.068 | lbs/mmBtu (3600 SCFM Flare) |
| Carbon Monoxide | 0.15 | lbs/mmBtu |
| Non-Methane Organic Compounds | 6.5 | lbs/mmcf LFG* |
| Volatile Organic Compounds | 2.5 | lbs/mmcf LFG* |

*These emission factors are based on 60% methane in the LFG, which represents the maximum methane percentage the flare manufacturers will guarantee. Actual methane percentages may be less.

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 14 of 08/30/2006 Permit)

3. **Emissions Limits** - Emissions from the operation of the 3600 SCFM open flare (D002) shall not exceed the limits specified below:

| | | |
|---|-------------|--------------|
| Particulate Matter/PM ₁₀ / PM _{2.5} | 2.1 lbs/hr | 3.9 tons/yr |
| Sulfur Dioxide | 3.0 lbs/hr | 5.6 tons/yr |
| Nitrogen Oxides | 8.1 lbs/hr | 15.0 tons/yr |
| Carbon Monoxide | 44.0 lbs/hr | 81.3 tons/yr |
| Non-Methane Organic Compounds | 4.2 lbs/hr | 7.7 tons/yr |

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 15 of 08/30/2006 Permit)

4. **Emissions Limits** - Emissions from the operation of each of the 2500 SCFM open flare (D003, D004 and D005) shall not exceed the limits specified below:

| | | |
|---|-------------|--------------|
| Particulate Matter/PM ₁₀ / PM _{2.5} | 1.5 lbs/hr | 6.7 tons/yr |
| Sulfur Dioxide | 1.3 lbs/hr | 5.9 tons/yr |
| Nitrogen Oxides | 3.6 lbs/hr | 15.8 tons/yr |
| Carbon Monoxide | 12.3 lbs/hr | 53.9 tons/yr |
| Volatile Organic Compounds | 0.4 lbs/hr | 1.6 tons/yr |
| Non-Methane Organic Compounds | 1.0 lbs/hr | 4.3 tons/yr |

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 16 of 08/30/2006 Permit)

5. **Emissions Limits** - Emissions from the six (6) open flares shall not exceed the limits specified below (after the shut down of the enclosed flare, vaporator and conversion of the engine to propane only):

Particulate Matter/PM₁₀ / PM_{2.5} 23.3 tons/yr

Sulfur Dioxide 20.5 tons/yr

Nitrogen Oxides 67.3 tons/yr

Carbon Monoxide 188.0 tons/yr

Volatile Organic
Compounds 5.7 tons/yr

Non-Methane Organic
Compounds 14.9 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 18 of 08/30/2006 Permit)

D. **Periodic and Other Monitoring**

1. **Gas control system** - The operation of the gas control system shall be monitored as follows:

- a. Gas flow, recorded at least once every 15 minutes.
- b. For an open flare, the presence of the pilot flame or the flare flame shall be continuously monitored by a heat-sensing device and recorded.

(9 VAC 5-80-110 and Condition 23 of 08/30/2006 Permit; D001 and F002 removed)

2. **Corrective actions** - If monitoring demonstrates that the requirements of Condition III.A.1 (d, e or j) are not being met, corrective actions shall be taken as specified in 40 CFR 60.755 (a) (3) through (5) or 40 CFR 60.755 (c). If corrective actions are taken as specified in 40 CFR 60.755(c)(4), the monitored exceedance is not a violation of the operational requirements of this permit or 40 CFR 60, Subpart WWW.

(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 24 of 08/30/2006 Permit)

3. **Gauge pressure** - The permittee shall measure gauge pressure in the header at each individual active well monthly. If a positive pressure exists, corrective action shall be taken within 5 calendar days of the exceedance, except for the three conditions allowed under §60.753(b). If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(9 VAC 5-50-410, 40 CFR 60.755(a)(3) and 40 CFR 60.753(b))

4. **Active well monitoring** - The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
(9 VAC 5-50-410, 40 CFR 60.755(a)(5))
5. **Surface methane** - The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals as detailed in the updated Surface Monitoring Design Plan for each collection area for which waste has been in place for two or more years if closed or at final grade or for which waste has been in place for five or more years if active. This surface methane monitoring shall take place on a quarterly basis. Areas with steep slopes or other dangerous areas may be excluded from this monitoring after receiving approval from the Director, Piedmont Region.
 - a. Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.
 - (1) The location of the exceedance shall be marked and recorded.
 - (2) The permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of the exceedance. The location shall be remonitored within 10 calendar days of detecting the exceedance.
 - (3) If the remonitoring of the location shows a second exceedance, the permittee shall take additional corrective action and shall monitor the location again within 10 days of the second exceedance.
 - (4) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm above background at the 10 day remonitoring shall be remonitored 1 month from the initial exceedance. If the 1 month remonitoring shows a concentration less than 500 ppm above the background, no further monitoring of that location is required until the next quarterly monitoring. If the 1 month remonitoring shows an exceedance, the permittee shall repeat the requirements of either paragraph (3) or paragraph (5) of this condition.
 - (5) For any location where the monitored methane concentration equals or exceeds 500 ppm above background 3 times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Director, Piedmont Region for approval.

(9 VAC 5-50-410, 40 CFR 60.755(c)(4) and 40 CFR 60.755(c)(1))

6. **Cover integrity** - The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
(9 VAC 5-50-410, 40 CFR 60.755(c)(5))
7. **Landfill gas** - The permittee shall install a sampling port and a port for temperature measurements at each wellhead. The permittee shall measure the gauge pressure in the gas collection header on a monthly basis. The permittee shall monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis. The permittee shall monitor temperature of the landfill gas on a monthly basis.
(9 VAC 5-50-410, 40 CFR 60.756(a))
8. **Open flare monitoring** - The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification the following equipment for the open flare (D002):
 - a. A heat sensing device at the flame to indicate the continuous presence of flame;
 - b. A flow rate measuring device that shall record flow to the flare at least every 15 minutes, or with a bypass line valve secured in the closed position with a car-seal or lock-and-key type configuration. If the permittee elects to comply with this provision by securing the bypass line valve, then permittee shall perform a visual inspection of the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
(9 VAC 5-50-410, 40 CFR 60.756(c))
9. **Requirements by Reference**- Except where the permit is more restrictive than the applicable requirements, the landfill as described in condition 2 shall be operated in compliance with the requirements of 40 CFR 60, NSPS Subpart WWW and 40 CFR 63, MACT Subpart AAAA.
(9 VAC 5-80-1180, 9 VAC 5-50-400, 9 VAC 5-50-410, 9 VAC 5-60-90 and 9 VAC 5-60-100, 9 VAC 5-80-110 and Condition 27 of 08/30/2006 Permit)
10. **Visible Emissions Evaluation** - Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 22, shall be conducted by the permittee on the new 2500 SCFM and 50 SCFM open flares. Each observations period shall be two (2) hours. The details of the tests are to be arranged with Director, Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated or within 180 days after initial start up of the new 2500 SCFM and 50 SCFM open flares. Should conditions prevent concurrent opacity observations, the Director, Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Director, Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-170-160, 9 VAC 5-50-30, 9 VAC 5-80-1200 and 9 VAC 5-80-110 and Condition 20 of 08/30/2006 Permit)

E. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Current maximum design capacity, current amount of refuse in place, and year by year refuse accumulation rates.
 - b. Description, location, amount, and placement date of all non-degradable refuse including asbestos and demolition refuse placed in landfill areas that are excluded from landfill gas estimation or landfill gas collection and control.
 - c. Installation date and location of all newly installed wells.
 - d. Map or plot showing each existing and planned well in the gas collection system with each well uniquely identified.
 - e. Maximum expected gas flow rate.
 - f. Parameters monitored in Conditions III.D.1, 3, 4, 5, 8, 9 and 10 above.
 - g. The yearly throughput of landfill gas to the open flares, calculated monthly as the sum of each consecutive 12-month period.
 - h. The yearly hours of operation of the open flares, calculated monthly as the sum of each consecutive 12-month period.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 28 of 08/30/2006 Permit)

2. The permittee shall record and have on hand for inspection purposes instances when positive pressure occurs in efforts to avoid a fire.
(9 VAC 5-50-410, 40 CFR 60.753(b)(1))
3. The permittee shall develop and have on hand a surface monitoring design plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals.
(9 VAC 5-50-410, 40 CFR 60.753(d))
4. The permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below as measured during initial performance tests or compliance determinations. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until the equipment is removed.
 - a. The landfill's maximum expected gas generation flow rate.
 - b. The landfill's density of wells, horizontal collectors, and surface collectors.

- c. For the open flares, the flare type (i.e., steam-assisted, air assisted, or unassisted); all visible emission readings; heat content determinations; flow rate or bypass flow rate measurements; exit velocity determinations made during the initial performance test; continuous records of the flare flame monitoring; and records of all periods of operations during which the flare flame is absent.

(9 VAC 5-50-410, 40 CFR 60.758(b))

- 5. The permittee shall keep for 5 years up-to-date, readily accessible continuous records of the following equipment operating parameters specified for monitoring:
 - a. wellhead gauge pressures measured monthly
 - b. wellhead temperatures measured monthly
 - c. wellhead nitrogen or oxygen concentrations measured monthly
 - d. flow rates to control equipment bypasses
 - e. presence of flames in flares
 - f. results of quarterly surface methane monitoring
 - g. periods of malfunctions of control or collection devices.

(9 VAC 5-50-410, 40 CFR 60.758(c))

- 6. The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system. This map shall also provide a unique identification location label for each collector. Additionally, the permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors.

(9 VAC 5-50-410, 40 CFR 60.758(d))

- 7. The permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(9 VAC 5-50-410, 40 CFR 60.758(e))

- 8. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the landfill gas collection and control system; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(9 VAC 5-50-410, 40 CFR 60.7(b))

F. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 33 of 08/30/2006 Permit)
2. After the installation of a gas collection and control system in compliance with 40 CFR 60.755, the permittee shall determine the actual NMOC concentration and LFG flow rate and shall calculate the NMOC emission rate in accordance with 40 CFR 60.754 (b) for reporting the uncontrolled NMOC emission rate for determining when the gas collection system can be removed.
(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 19 08/30/2006 Permit)
3. The permittee shall provide safe sampling platforms, safe access to sampling platforms, and utilities for sampling and testing equipment.
(9 VAC 5-50-410, 40 CFR 60.8(e))
4. If measured, the nitrogen level at each wellhead shall be determined by using Method 3C.
(9 VAC 5-50-410, 40 CFR 60.753(c)(1))
5. The oxygen level at each wellhead shall be determined by an oxygen meter using Method 3A or 3C except for the following:
 - a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.
 - b. A data recorder is not required.
 - c. Only a zero and a span calibration gas are required. Ambient air may be used as span.
 - d. A calibration error check is not required.
 - e. The allowable sample bias, zero drift, and calibration drift are 10%.
(9 VAC 5-50-410, 40 CFR 60.753(c)(2))
6. The background concentration of methane during surface emissions monitoring shall be determined for the instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
(9 VAC 5-50-410, 40 CFR 60.755(c)(2))
7. Surface emission monitoring shall be performed in accordance with 40 CFR 60 Appendix A, Method 21, Section 4.3.1 except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
(9 VAC 5-50-410, 40 CFR 60.755(c)(3))

8. The portable analyzer used to determine the surface methane concentration shall meet the instrument specifications provided in 40 CFR 60, Appendix A, Method 21, Section 3, except that methane shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To meet the performance evaluation requirements in section 3.1.3 of Method 21, the instrument evaluation procedures of Section 4.4 of Method 21 shall be used. The calibration procedures in Section 4.2 of Method 21 shall be followed immediately before commencing a surface monitoring survey.
(9 VAC 5-50-410, 40 CFR 60.755(d))
9. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

| Pollutant | Test Method (40 CFR Part 60, Appendix A) |
|---------------------|---|
| NMOC/VOC | EPA Method 18 or 25C |
| NO _x | EPA Method 7 |
| SO ₂ | EPA Method 6 |
| CO | EPA Method 10 |
| PM/PM ₁₀ | EPA Methods 5, 17 |
| Visible Emission | EPA Method 9 |

(9 VAC 5-80-110)

G. Reporting

1. **Semi-Annual Compliance Report** – A semi-annual compliance report shall be submitted to the Director, Piedmont Region Office by the date specified below and shall contain the following:
 - a. The initial performance test report for each new open flare shall contain the following information:
 - i. The type of flare.
 - ii. All visible emissions readings.
 - iii. Heat content determination.
 - iv. Gas flow rate or bypass measurement.
 - v. Exit velocity determination
 - b. Value and length of time for exceedance of applicable parameters monitored under sections 40 CFR 60.756 (a), (b), (c), and (d);
 - c. Description and duration of all periods when the control device was not working for a period exceeding 1 hour and length of time control device was not operating;
 - d. All periods when the collection system was not operating in excess of 5 days;
 - e. The location of each exceedance of the 500 parts per million surface methane concentration, and the concentration recorded at each location for which an exceedance was recorded as provided in 40 CFR 60.755 (c);

- f. The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a) (3), (b), and (c) (4) of 60.755.

Items (b) through (f) shall be submitted every six months. Semi-annual report shall cover the calendar year (January through June and July through December). One copy of the reports shall be submitted to U.S. Environmental Protection Agency at the address specified in condition IX.D. The annual reports and semi-annual reports, to include NESHAP Subpart AAAA reports (Subsection 63.1930), shall be submitted by March 1 and September 1 of the calendar year.

(9 VAC 5-50-410, 40 CFR 60.757(f), 40 CFR 60.753(b)(1), 9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 29 of 08/30/2006 Permit)

2. **Closure Report** - The permittee shall submit a closure report to the Director, Piedmont Regional Office within 30 days of the date the MSW landfill stopped accepting waste.
(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 30 of 08/30/2006 Permit)
3. **Equipment Removal Report** - The permittee shall submit an equipment removal report to the Director, Piedmont Regional Office 30 days prior to the removal or cessation of operation of the control equipment.
(9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR 60.757(e) and Condition 31 of 08/30/2006 Permit)
4. **Annual Emission Report for Fee Calculation** - The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the department.
(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 32 of 08/30/2006 Permit)
5. **Initial Notifications** - The permittee shall furnish written notification to the Director, Piedmont Region:
 - a. The actual date on which installation of each 2500 SCFM open flare commenced within 30 days after such date.
 - b. The anticipated start-up date of each 2500 SCFM open flare postmarked not more than 60 days or less than 30 days prior to such date.
 - c. The actual start-up date of each 2500 SCFM open flare within 15 days after such date.

Copies of the written notifications referenced in this items a through c above shall be sent to:

Associate Director, Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 21 of 08/30/2006 Permit)

III. Storage Tank Requirements - NSPS Subpart Kb

The permittee shall keep readily accessible records showing the dimension of the following storage vessels:

- P08 - 250,000 gallon leachate storage tank
- P09 - 250,000 gallon leachate storage tank

and an analysis showing the capacity of each storage vessel. These records shall be kept by the permittee for the life of the storage vessel.

(9 VAC 5-50-410, 40 CFR 60.116b(a), and 40 CFR 60.116b(b))

IV. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

| Emission Unit No. | Emission Unit Description | Citation | Pollutant(s) Emitted (9 VAC 5-80-720 B) | Rated Capacity (9 VAC 5-80-720 C) |
|-------------------|---------------------------|------------|---|-----------------------------------|
| P01 | Used oil tank | 5-80-720 B | VOC | 1,000 gal. |
| P02 | #2 fuel oil tank | 5-80-720 B | VOC | 10,000 gal. |
| P03 | #2 fuel oil tank | 5-80-720 B | VOC | 8,000 gal. |
| P04 | Lube oil tank | 5-80-720 B | VOC | 500 gal. |
| P05 | Lube oil tank | 5-80-720 B | VOC | 250 gal. |
| P06 | Lube oil tank | 5-80-720 B | VOC | 250 gal. |
| P07 | Propane tank | 5-80-720 B | VOC | 1,000 gal. |
| P10 | Leachate tank | 5-80-720 B | VOC | 8,000 gal. |
| P11 | Lube oil tank | 5-80-720 B | VOC | 250 gal. |
| P12 | Propane tank | 5-80-720B | VOC | 1,000 gal. |

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

V. Compliance Plan

Not applicable

VI. Future Applicable Landfill Requirements

A. Requirements for Landfill Closure

1. The collection and control system may be capped or removed provided that all the following conditions are met:
 - a. The landfill shall be a closed landfill. A closed landfill is defined as a landfill in which solid waste is no longer being placed and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed in the General Provisions of 40 CFR 60. A closure report shall be submitted to DEQ.
 - b. The collection and control system shall have been operating at least 15 years.
 - c. The calculated NMOC gas production shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart and no more than 180 days apart.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(v))

2. The permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed using the following equation:

$$M_{nmoc} = 1.89 \times 10^{-3} Q_{lfg} \times C_{nmoc} \quad \text{where:}$$

M_{nmoc} = mass emission rate of NMOC, Mg/year

Q_{lfg} = flow rate of landfill gas, cubic meters/minute

C_{nmoc} = NMOC concentration, ppmv as hexane

- a. Q_{lfg} shall be determined by measuring the total landfill gas flow rate at the common header pipe to the control device using a gas flow measuring device calibrated according to the provisions of 40 CFR 60, Appendix A, Method 2E, Section 4.
 - b. C_{nmoc} shall be determined by collecting and analyzing landfill gas sampled from the common header pipe using Method 25C or Method 18. The minimum list of compounds shall be those published in the most recent version of AP-42 for Method 18. The sample location on the common header pipe shall be before any condensate removal or refining units. The permittee shall divide the NMOC concentration from Method 25C by six to convert from C_{nmoc} as carbon to C_{nmoc} as hexane.
 - c. The owner or operator may use other test methods if approved by the Administrator.
(9 VAC 5-50-410, 40 CFR 60.754(b))
3. The permittee shall submit a closure report to DEQ within 30 days of waste acceptance cessation. DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E. and F. If a closure report has been submitted to the DEQ, no additional wastes may be placed into the landfill without filing a notification of modification.
(9 VAC 5-50-410, 40 CFR 60.757(d))
4. The permittee shall submit an equipment removal report to the DEQ 30 days prior to removal or cessation of operation of the control equipment. The report shall contain the following:
- a. A copy of the closure report.
 - b. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired.
 - c. Dated copies of 3 successive NMOC emission rate reports demonstrating the landfill is no longer producing 50 Mg or greater of NMOC per year. DEQ may request additional information to verify that all conditions for removal have been met.
(9 VAC 5-50-410, 40 CFR 60.757(e))

VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

| Citation | Title of Citation | Description of Applicability |
|--|---|--|
| 9 VAC 5-40-5800 and 40 CFR 60 Subpart Cc | Emission Standards for Sanitary Landfills Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills | These articles only apply to municipal solid waste landfills which commenced construction, reconstruction or modification before May 30 1991. |
| 40 CFR 60 Subpart Kb | Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction or Modification Commenced after July 23, 1984. | Storage vessels with a capacity greater than or equal to 40 cubic meters (10,567 gallons) constructed, reconstructed or modified after July 23, 1984. Insignificant emission units numbered P01, P02, P03, P04, P05, P06, P07, P10, P11 and P12 have capacities of less than 10,567 gallons and therefore this standard is not applicable. |

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

VIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
3. The permittee shall submit the following information associated with monitoring required under the Permit to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:
Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region. (9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

- d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

IX. State-Only Enforceable Requirements

1. **Emissions Limits** - Emissions from the operation of the 50 SCFM open flare (D006 and D007) shall not exceed the limits specified below:

| | | |
|-----------------|------------|-------------|
| Nitrogen Oxides | 0.1 lbs/hr | 0.3 tons/yr |
| Carbon Monoxide | 0.2 lbs/hr | 1.1 tons/yr |

(9 VAC 5-50-260 and Condition 17 of 08/30/2006 Permit)

The emissions limits for these two small odor control flares are state only enforceable, but are included in the facility wide limits to avoid PSD applicability.

To: **Air Compliance Manager**
 Department of Environmental Quality – Piedmont Regional Office
 4949-A Cox Road
 Glen Allen, VA 23060

From: **(Facility Name)**

Registration No. _____

Re: **TITLE V ANNUAL COMPLIANCE CERTIFICATION**

Date:

Please find attached our Title V Annual Compliance Certification for the period from ____/____/____ to ____/____/____. It identifies each term or condition of the permit that is the basis of the certification. All deviations and periods of non-compliance for the period have been addressed in semi-annual monitoring reports that have either been previously submitted or are enclosed.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Signature)

(Name & Title)

cc: Director, Air and Waste Division (Mail drop 3AP00)
 United States Environmental Protection Agency -- Region III
 1650 Arch Street
 Philadelphia, PA 19103-2029

(Annual Compliance Certifications are due 60 days following end of reporting period.)

To: **Air Compliance Manager**
 Department of Environmental Quality – Piedmont Regional Office
 4949-A Cox Road
 Glen Allen, VA 23060

From: *(Facility Name)*

Reg. No. _____

Re: **PROMPT DEVIATION REPORT – Pursuant to Title V Permit**

Date:

This confirms the deviation reported to the Regional Office at _____ o'clock on ____/____/____. The details are described below. The deviation may have caused excess emissions for more than one hour, consistent with specified averaging times. None of these deviations were related to a malfunction.

| | | |
|---|-----------------------------|----------------------------|
| Start date & time: | End date & time: | Estimated Duration: |
| Deviation from which permit condition (<i>condition number and brief description</i>): | | |
| Description of incident (<i>including emission unit affected</i>): | | |
| Description of Monitoring Requirement for affected unit(s): | | |
| Probable cause: | | |
| Description of corrective measures taken (<i>demonstrating a timely & appropriate response</i>): | | |
| Description of preventive measures taken: | | |

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Signature)

(Name & Title)

To: Air Compliance Manager
Department of Environmental Quality – Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

From: (Facility Name)

Reg. No. _____

Re: SEMI-ANNUAL MONITORING REPORT – Pursuant to Title V Permit

Date:

The following monitoring report is submitted as required by our Title V permit. For the purposes of this report, deviation means (1) exceedances of emission limits, as determined by such means as stack testing, continuous emission monitors, parametric monitoring and EPA Method 9 visible emission evaluations; (2) excursions from control device operating parameter requirements such as afterburner temperature, scrubber flow rate, baghouse pressure drop; (3) excursions from operational restrictions things such as throughput, fuel quality, and coating VOC and HAP content; and (4) failure to meet monitoring, record keeping or reporting requirements. The report addresses all data points, which are above a standard, limit etc, according to the averaging period, if any, specified in the permit. If no averaging period is specified in the permit, then any monitored reading is considered a deviation to be reported. Deviations are reported regardless of whether they may have caused excess emissions or whether they were the result of a malfunction.

The period covered by the report is from ____/____/____ to ____/____/____.

During the reporting period:

☐ No deviations from permit requirements occurred during this semi-annual reporting period. (We conducted all required monitoring and associated record keeping and reporting. Required monitoring revealed no deviations from permit requirements.)

☐ We failed to conduct required monitoring/record keeping/reporting as explained on the attached form.

☐ We identified deviations as a result of required monitoring:

☐ Deviations were addressed in CEM Excess Emission Report(s) dated: _____

☐ Deviations were addressed in Fuel Report(s) dated: _____

☐ Deviations were addressed in MACT Report(s) dated: _____

☐ Deviations due to malfunctions were addressed in letters dated: _____

☐ Deviations were addressed in other report(s) dated: _____

Type of report: _____

☐ Deviations were previously described in Prompt Deviation Reports dated: _____

☐ “Other” deviations, which were not previously reported, are described in the attachment.

Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Signature)

(Name & Title)

FAILURE TO MONITOR, KEEP RECORDS OR REPORT Registration No. _____ Page _____ of _____
Submitted as Part of Semi-Annual Monitoring Report

[illegible]

Annual Compliance Certification

Registration No. _____

Page _____ of _____

| Cond. No. | TERMS & CONDITIONS CONTAINED IN THE PERMIT <i>(list in order)</i> | MEANS OF DETERMINING COMPLIANCE STATUS | TYPE OF DATA THE MEANS PROVIDES | PERIODS OF NON-COMPLIANCE |
|-----------|--|--|--|---|
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent | <input type="checkbox"/> Yes <input type="checkbox"/> No |

“OTHER” DEVIATIONS

Submitted as Part of Semi-Annual Monitoring Report

Registration No. _____

Page _____ of _____

| Condition No. & Description of Requirement | Description of Deviation (time, emission unit, description of event, cause) | Description of Associated Monitoring Requirement | Description of corrective measures taken (<i>demonstrating a timely & appropriate response</i>) |
|---|---|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

(Report deviations which may have caused excess emissions for more than one hour on a deviation report form, not here.)